

# Rhode Island



— Basin Boundaries  
(USGS 6-Digit Hydrologic Unit)

For a copy of the Rhode Island 1996 305(b) report, contact:

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## Surface Water Quality

Seventy-three percent of Rhode Island's rivers, over 75% of lakes, and 96% of estuarine waters support aquatic life uses. However, many of these waters are considered threatened. About 75% of rivers, more than 92% of lakes, and 93% of estuaries fully support swimming. The most significant pollutants in Rhode Island's waters are heavy metals (especially copper and lead), bacteria, low dissolved oxygen, excess nutrients, and low pH/low buffering capacity. Recurring algae blooms and high nutrients threaten the use of several surface waters for drinking water supplies.

Rivers and estuaries are impacted by industrial and municipal discharges, agricultural runoff, combined sewer overflows, urban

runoff, highway runoff and disposal of wastes, failed septic systems, and contaminated sediments. Lakes are primarily impacted by nonpoint sources, including septic systems, storm water runoff, and soil erosion.

## Ground Water Quality

About 19% of the State's population is supplied with drinking water from public and private wells. Overall, Rhode Island's ground water has good to excellent quality, but over 100 contaminants have been detected in localized areas. Thirteen community and eight noncommunity wells have been closed and over 350 private wells have had contaminant concentrations exceeding drinking water standards. The most common pollutants are petroleum products, certain organic solvents, and nitrates. Significant pollution sources include leaking underground storage tanks, hazardous and industrial waste disposal sites, illegal or improper waste disposal, chemical and oil spills, landfills, septic systems, road salt storage and application, and fertilizer application.

## Programs to Restore Water Quality

Now in the midst of a major departmental reorganization, the RIDEM Office of Water Resources is taking the opportunity to initiate the transition from program-centered management to a watershed approach. The watershed approach coordinates monitoring, modeling, planning, permitting, and enforcement activities within a geographic area. This watershed-based framework for coordinated planning and action will increase departmental efficiency, enhance internal and external communication, allow for targeting of resources to priority areas and issues, bring collaborative

problem solving into management decisions, and help build a constituency for environmental protection and restoration actions.

## Programs to Assess Water Quality

Surface water quality monitoring activities conducted in Rhode Island waters range from investigation of complaints to intensive river and watershed monitoring projects. The Office of Water Resources (OWR) performs bacteriological monitoring at all State-owned beaches and provides intensive bacteriological monitoring of shellfishable waters. OWR has contracted with the USGS to conduct riverine monitoring at six stations in Rhode Island. Biological monitoring, utilizing artificial substrates, is conducted at six river stations near the USGS fixed river stations. The USEPA Rapid Bioassessment Protocols are followed for macroinvertebrate sampling at 40 stream sites around the State. Twenty-five of these 40 stations are also monitored for various conventional and toxic pollutants. The OWR is involved in 10 watershed monitoring projects. These projects are in accordance with the Department's initiation of a Watershed Approach and total maximum daily load (TMDL) development. Surface water monitoring activities are also conducted by many Citizens Monitoring groups. These groups supply the OWR with supplemental water quality data for numerous rivers, lakes, ponds, and estuarine waters of the State.

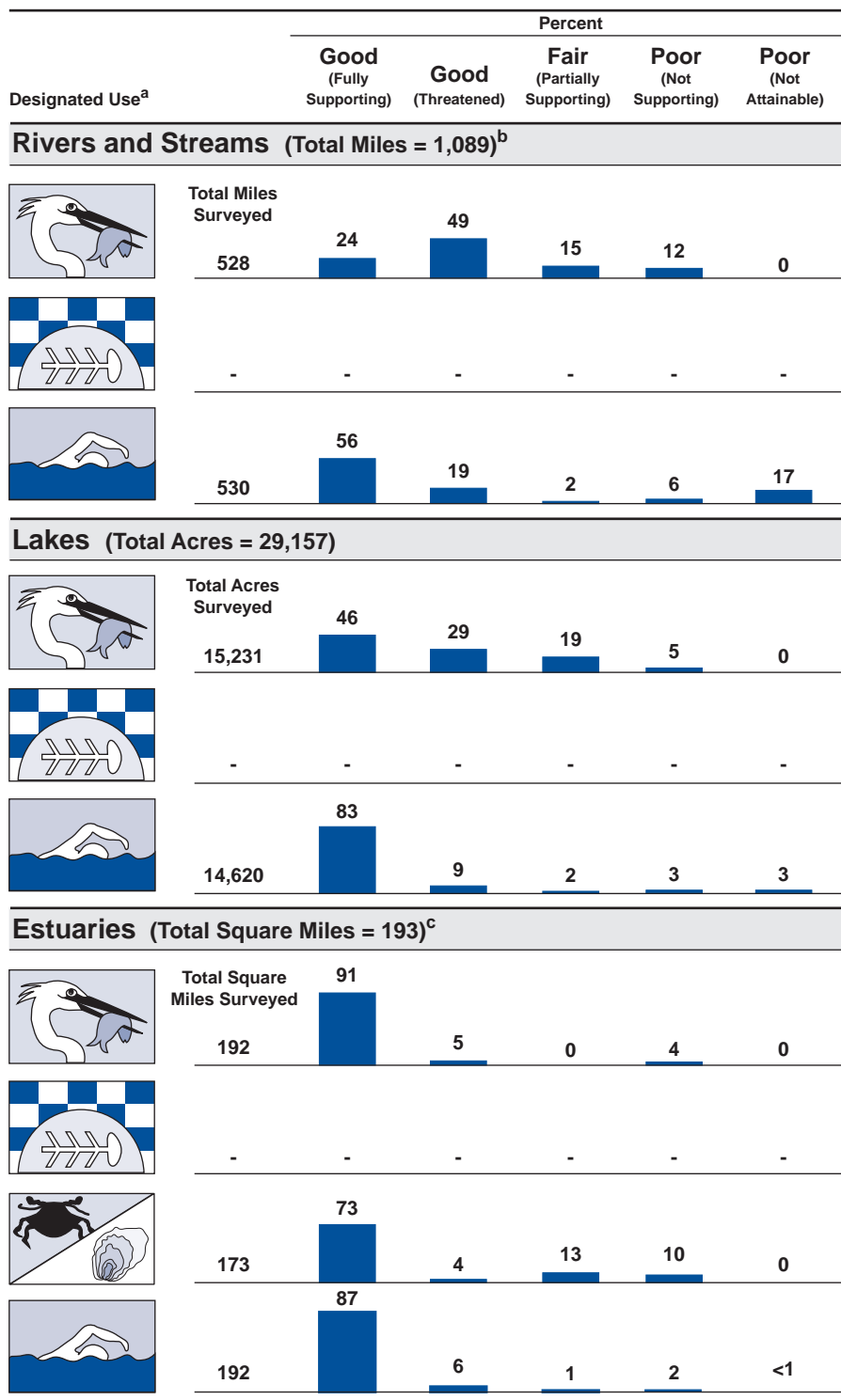
– Not reported in a quantifiable format or unknown.

<sup>a</sup> A subset of Rhode Island's designated uses appear in this figure. Refer to the State's 305(b) report for a full description of the State's uses.

<sup>b</sup> Includes nonperennial streams that dry up and do not flow all year.

<sup>c</sup> Includes ocean waters.

## Individual Use Support in Rhode Island



Note: Figures may not add to 100% due to rounding.